REMARKS / ARGUMENTS

The present Amendment is in response to the Examiner's Final Office Action mailed November 14, 2008. Claims 1, 15 and 26 are amended, and claims 1-33 remain pending in view of the above amendments. Applicant notes that the following remarks are not intended to be an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed below are presented solely by way of example to illustrate some of the differences between the claimed invention and the cited references. Applicant also notes that the remarks presented herein have been made merely to clarify the claimed embodiments from elements purported by the Examiner to be taught by the cited reference. Such remarks, or a lack of remarks, are not intended to constitute, and should not be construed as, an acquiescence, on the part of the Applicant: as to the purported teachings or prior art status of the cited references; as to the characterization of the cited references advanced by the Examiner; or as to any other assertions, allegations or characterizations made by the Examiner at any time in this case. Applicant reserves the right to challenge the purported teaching and prior art status of the cited references at any appropriate time. Reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following remarks.

Rejection Under 35 U.S.C. § 103

The Examiner rejects claims 1-3, 15, 16, 17, 19-24, 26, 27, and 29-31 under 35 U.S.C. § 103 as being unpatentable over *Worrall et al.* (U.S. Patent Publication No. 2006/0153177) in view of *Sørhaug et al.* (U.S. Patent No. 6,424,627) and further in view of *Yanacek et al.* (U.S. Patent No. 5,940,376).

The Examiner rejected claim 14 under 35 U.S.C. § 103 as being unpatentable over *Worrall et al.* (U.S. Patent Publication No. 2006/0153177) in view of *Sørhaug et al.* (U.S. Patent No. 6,424,627) further in view of *Yanacek et al.* (U.S. Patent No. 5,940,376) as applied to claims 1 and 13 above, and further in view of *Bouthillier et al.* (U.S. Patent No. 6,092,724).

The Examiner rejected claim 18 under 35 U.S.C. § 103 as being unpatentable over *Worrall et al.* (U.S. Patent Publication No. 2006/0153177) in view of *Sørhaug et al.* (U.S. Patent No. 6,424,627) further in view of *Yanacek et al.* (U.S. Patent No. 5,940,376) as applied to claims 15 and 17 above, further in view of *Bunker et al.* (U.S. Patent Publication No. 2003/0056116) and further in view of *Chinnock et al.* (U.S. Patent No. 5,426,427).

The Examiner rejected claim 25 under 35 U.S.C. § 103 as being unpatentable over *Worrall et al.* (U.S. Patent Publication No. 2006/0153177) in view of *Sørhaug et al.* (U.S. Patent No. 6,424,627) further in view of *Yanacek et al.* (U.S. Patent No. 5,940,376) as applied to claim 16 above, and further in view of *Pontis et al.* (U.S. Patent Publication No. 2004/0007526).

The Examiner rejected claim 28 under 35 U.S.C. § 103 as being unpatentable over *Worrall et al.* (U.S. Patent Publication No. 2006/0153177) in view of *Sørhaug et al.* (U.S. Patent No. 6,424,627) further in view of *Yanacek et al.* (U.S. Patent No. 5,940,376) as applied to claim 27 above, and further in view of NetOptics (4x1 GigaBit Tap).

The Examiner rejected claims 32 and 33 under 35 U.S.C. § 103 as being unpatentable over *Worrall et al.* (U.S. Patent Publication No. 2006/0153177) in view of *Sørhaug et al.* (U.S. Patent No. 6,424,627) further in view of *Yanacek et al.* (U.S. Patent No. 5,940,376) as applied to claim 26 above, further in view of *Tomonaga et al.* (U.S. Patent No. 5,610,913) and further in view of *Gromov* (U.S. Patent No. 6,975,209).

When applying § 103, the Examiner is required to adhere to the following tenets of patent law:

(A)   The claimed invention must be considered as a whole;

(B)   The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination;

(C)   The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and

(D)   Reasonable expectation of success is the standard with which obviousness is determined. *See* MPEP § 2141(II).

In addition, the Examiner is required to demonstrate that all of the limitations of the claims are taught or suggested in the prior art. *See* MPEP § 2143.03. The following discussion illustrates that the Examiner has not satisfied these requirements.

The Examiner indicates that *Sørhaug* remedies some of *Worral's* deficiencies by teaching at least one of the first and second tap ports configured to receive device data from the attached device and means for inserting device data from the attached device into the network cable without disrupting the flow of data therein. *See* OA at page 6.

The Examiner indicates that *Sørhaug's* teachings of:

      (i)   "the media monitor may interrupt medium data transfer in either direction and insert its data for diagnostic or other network purposes" and

      (ii)   (ii) "the network monitor or medium analyzer can selectively insert data in either direction to provide complete diagnostic control testing of the channel"

show that *Sørhaug* has anticipated both disruptive interruption of traffic for diagnostics and selective insertion of data without discussing any data disruption. The Examiner further alleges that this inherently discloses only two options for data insertions (disruptively or non-disruptively). Applicants traverse.

Applicant respectfully submits that these teachings do not teach or suggest both disruptive or nondisruptive data insertions. As the Examiner has noted, citation (i) above indicates that disruption may occur, not that it must. Clearly, the media monitor (e.g., the media monitor 40 in Figure 2) either interrupts to insert data or it does not. Thus, it may interrupt medium data transfer. This does not, however, indicate both disruptive and non-disruptive data insertion. In fact, when considering the reference as a whole as discussed in more detail below, it suggests that, when data insertion is desired, the medium monitor interrupts the medium data transfer.

More specifically, *Sørhaug* discloses a media monitor that does not need to disrupt – as long as no data is inserted. If *Sørhaug* chooses to insert data, however, *Sørhaug* discloses that the medium data transfer is interrupted. Thus, *Sørhaug*

discloses a disruption the medium data transfer when data insertion is needed. It does not, in contrast, suggest non-disruptive data insertion.

Citation (ii) above has the same connotation as citation (i). The use of the term "selective" suggests that a disruption is made in order to provide complete diagnostic control testing of the channel. In other words, providing complete diagnostic control testing of the channel disrupts the medium data transfer. In fact, the terms "in order to provide <u>complete diagnostic control . . . of the channel</u> further suggest that the medium data transfer is disrupted in order to provide the monitor 40 with complete control of the channel.

In other words, neither of the citations identified by the Examiner support the insertion of data in both a disruptive manner and a non-disruptive manner. In fact, they suggest the insertion of data in a disruptive manner alone, but do not disclose or suggest the insertion of data in a non-disruptive manner. Citation (i) suggests that in order to insert data, the medium data transfer is interrupted.

The failure to teach the non-disruptive insertion of data is particularly evident when these the patent is considered as a whole, as is required to establish a rejection under section 103. The following discussion references Figures 2 and 3 (reproduced below) of *Sørhaug* and illustrates that the claims are patentable over the cited art.

When considering the reference as a whole, it becomes apparent that <u>selective</u> does not teach or suggest "without disrupting the flow of data." Nor does it disclose or suggest that the "means for inserting device data coordinates transmission of the device data in the network cable with the network data flowing therein to avoid data collisions" as recited in claim 1.

For example, Figure 2 of *Sørhaug* illustrates a system for monitoring data from a network medium providing bidirectional data flow between two system devices 51 and 55. *See* col. 2, lls. 41-44. The monitoring is achieved via a media tap and media data links 52A and 52B. *See* col. 2, lls. 44-45.

Figure 2 of *Sørhaug* illustrates that the media tap 50 connects the media monitor 40 to destination A or destination B. In fact, Figure 2 suggests that when the media monitor is connected, the direct link between destination B and destination A is broken.

Sørhaug plainly states that upon "control by the media monitor 40, replacement media data via data lings 58 and 56 may be inserted on 52A and 52B **instead** of data from system devices 55 and 51 according to media monitor 40 control." *See* col. 2, lls. 51-55.
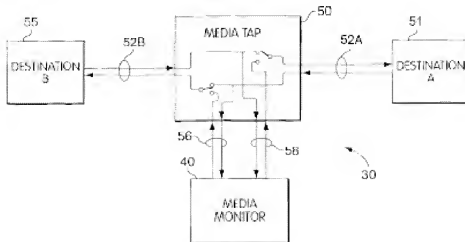

Fig. 2

This clearly illustrates that the ability to insert data may occur according to citation (i). In other words, data insertion occurs upon control by the media monitor 40 – which suggests a disruption of the medium data transfer between the devices 55 and 51. This also illustrates that the insertion of data is, in accordance with citation (ii), selective. In each case, however, the media data transfer between devices 55 and 51 is disrupted. As a result, *Sørhaug* does not disclose or suggest the insertion of data in a non-disruptive manner as recited in claim 1. Further, there is no suggestion of coordinating the transmission of data to avoid collisions with the network data flowing therein. Upon control of the media monitor, there is no network data flowing directly between the devices 51 and 55.
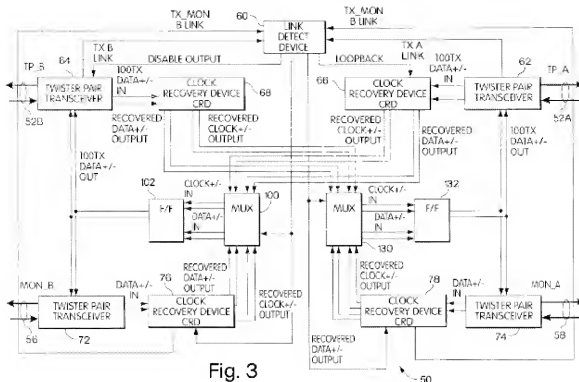
Fig. 3

This aspect of inserting replacement data instead of data from the devices 51 and 55 is illustrated in Figure 3. For example, if it is desired to send diagnostic data through the link 52B of the channel, the monitor 40 returns, via data link 56, signals to the tap 50. The detected signal then results in a corresponding control signal sent to the link detect circuit 60 which in turn provides a signal to serial multiplexer 100, causing the recovered monitor 40 data and clock signal to be sent to the synchronizing flip-flop 102 for transmission to the system devices 55. *See* col. 3, lls. 11-21.

The selective insertion of data, as taught by *Sørhaug*, is achieved using the multiplexer 100 or 130. These teachings illustrate that the data transmitted via the transceiver 64 to/from the device 55 originates either from the transceiver 62 (connected with the device 51) or the monitor 40 via the transceiver 72.

The multiplexer 100 illustrates the ability to <u>select</u> which data is transmitted. As a result, the tap 50 taught by *Sørhaug* cannot transmit the diagnostic data (e.g., device data) without switching the multiplexer 100, an operation that disrupts the network data

flowing from the device 51. The multiplexer 130 acts similarly to select either the data from the transceiver 64 or from the monitor 40 via the transceiver 58.

As a result, the teaching of the multiplexer to select either the network data or the diagnostic data illustrates that diagnostic data or device is transmitted only by disrupting the network data.

As described above, the ability to selectively insert data in either direction relies on multiplexers that disrupt communication between the devices 51 and 55 flowing in the channels 52A and 52B. . As a result, *Sørhaug* fails to teach or suggest the element in claim 1 of "means for inserting device data from the attached device . . . without disrupting the flow of data in the network cable."

For at least these reasons and because the other references have not been shown to remedy the deficiencies demonstrated herein, Applicant respectfully submits that claim 1 is patentable over the cited art. Independent claims 15 and 26 include at least some generally similar elements and are patentable for at least the same reasons. The dependent claims are patentable for at least the same reasons.

Conclusion

In view of the foregoing, Applicant believes the claims as presented herein are in allowable form. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, or which may be overcome by an Examiner's Amendment, the Examiner is requested to contact the undersigned attorney.

Dated this 14th day of April, 2009.

Respectfully submitted,

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